

AERO Design Ltd.
2013 - 39th Ave. NE
Calgary, AB, T2E 6R7

AUTHORIZED RELEASE CERTIFICATE

TRANSPORT CANADA
TCCA 24-0078
AMF # 73-04

Product: Quick Release Forward Beam Part #: 69830-01

Approval #: SH00-48 Serial #: --

WO #: 2006-09 Quantity: 1

Eligibility: Bell 206L / 407. Work Status: Manufactured

Remarks: _____

I hereby certify that the product identified above has been manufactured in accordance with the applicable design data and the Canadian Aviation Regulations or applicable foreign regulations.

Sept 27/06
Date

Jeff Clarke
Inspector's Signature

AERO Design Ltd.
2013 - 39th Ave. NE
Calgary, AB, T2E 6R7

AUTHORIZED RELEASE CERTIFICATE

TRANSPORT CANADA
TCCA 24-0078
AMF # 73-04

Product: Quick Release Aft Beam Part #: 69831-01

Approval #: SH00-48 Serial #: --

WO #: 2006-09 Quantity: 1

Eligibility: Bell 206L / 407 Work Status: Manufactured

Remarks: _____

I hereby certify that the product identified above has been manufactured in accordance with the applicable design data and the Canadian Aviation Regulations or applicable foreign regulations.

Sept 27/06
Date

Jeff Clarke
Inspector's Signature

WORK ORDER 2006-09

Date opened: 21 August 2006

Project: Quick Release Cargo Basket Beams
Type: Bell 206L Series, 407Batch Quantity: 1 Forward Beam Ass'y (69830-01)
1 Aft Beam Ass'y (69831-01)Approval: SH00-48
Drawing List: DCL698-1

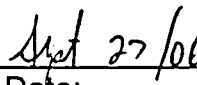
<u>Fabrication and Assembly Drawing(s)</u>	<u>Description</u>
69830, Rev. 1	Forward Beam Ass'y
69831, Rev. 1	Aft Beam Ass'y

Complete material tracking information on attached pages.

Work Order pre-completion Inspection:

Project is on Approval Limitation Record:	<u>Y ✓</u>
Document Control List revision level matches (or exceeds) STC:	<u>Y ✓</u>
Drawings revision levels match Document Control List:	<u>Y ✓</u>
Purchase order or Work order source is recorded for each part/ass'y:	<u>Y ✓</u>
Tests and inspections specifically called out on drawings are complete:	<u>Y ✓</u>
Release tags associated with all fabricated parts are attached:	<u>Y ✓</u>
All mounting hardware and supplies are included:	<u>Y ✓</u>

List all non-conformities raised: _____


Inspector Signature: _____
Date: _____

Drawing: 69830 Revision 1
 Assembly: 69830-01 Forward Beam Ass'y (Quick-Release)

Qty Per	Part #	Description	Material	P.O./W.O.	Checked
1 Total	69830-01	Forward Beam Assembly			
1	69830-03	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
1	69830-04	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
2	69830-05	Bushing	1018 Mild Steel, 5/8" Rod	951108	
1	69830-06	Strap	4130 Steel, 0.125" Sheet	6031	
1	69830-07	Hook	CSA G40.21 50W, 1x2x0.125 tube	6055	
2	69830-08	Hook Support	CSA G40.21 50W, 1x1x0.125 angle	6053	
1	69830-09	Cap	1018 Mild Steel, 0.025" Sheet	9506142	
1	69830-10	Cap	1018 Mild Steel, 0.025" Sheet	9506142	
1	69830-11	Guide	304 Stainless, 3/4" x 0.058" Rnd. Tube	6049	
1	69830-21	Stop	6061-T6 Aluminum, 5/8" Rod	6061	
1	69830-22	Knob	6061-T6 Aluminum, 3/4" Rod	3005	
1	69830-23	Spring	15mm x 70 mm Spring	6063	
1	#10-32	Screw	Stainless Steel, Commercial	6069	
1	MS21044C3	Nut		1013	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER70S-2, AMS 5680A		<i>David...</i>
Powder Coat	Drawing 69830	PO 6072	✓	<i>Jeff Clarke</i>
Final Inspection	Drawing 69830		✓	<i>Jeff Clarke</i>

Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.

Drawing: 69831 Revision 1
 Assembly: 69831-01 Aft Beam Ass'y (Quick-Release)


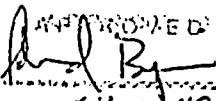
Qty Per	Part #	Description	Material	P.O./W.O.	Checked
1 Total	69831-01	Aft Beam Assembly			
1	69831-03	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
1	69831-04	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
1	69831-05	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
2	69830-05	Bushing	1018 Mild Steel, 5/8" Rod	951108	
1	69830-06	Strap	4130 Steel, 0.125" Sheet	6031	
1	69830-07	Hook	CSA G40.21 50W, 1x2x0.125 tube	6055	
2	69830-08	Hook Support	CSA G40.21 50W, 1x1x0.125 angle	6053	
1	69830-09	Cap	1018 Mild Steel, 0.025" Sheet	9506142	
1	69830-10	Cap	1018 Mild Steel, 0.025" Sheet	9506142	
1	69830-11	Guide	304 Stainless, 3/4" x 0.058" Rnd. Tube	6049	
1	69830-21	Stop	6061-T6 Aluminum, 5/8" Rod	6061	
1	69830-22	Knob	6061-T6 Aluminum, 3/4" Rod	3605	
1	69830-23	Spring	15mm x 70 mm Spring	6063	
1	#10-32	Screw	Stainless Steel, Commercial	6069	
1	MS21044C3	Nut		1013	

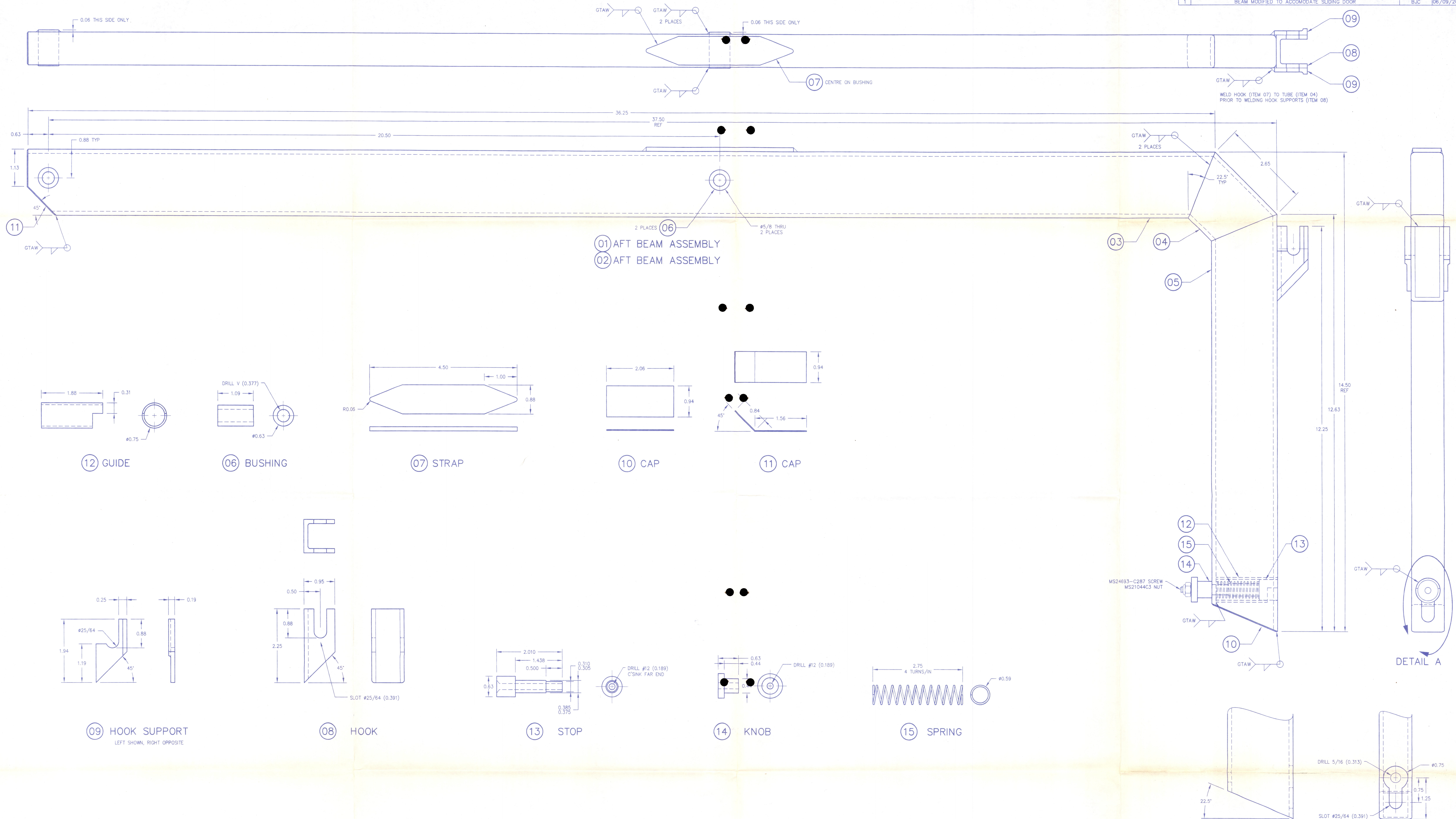
Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER70S-2, AMS 5680A	✓	<i>[Signature]</i>
Powder Coat	Drawing 69831	po 6072	✓	<i>[Signature]</i>
Final Inspection	Drawing 69831			<i>[Signature]</i>

Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.

DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
FABRICATION DOCUMENTS		
69830 69831	Forward Beam Fabrication Aft Beam Fabrication	1 1
ENGINEERING DOCUMENTS		
ER698.02 TP698.03	Engineering Report Test Plan	0 0
<div>APPROVAL:  Transport Canada S. PAROON DIRECTOR By  Approved: 5/600-48 Date: 08 DEC 2006 S Date: 09 JUNE 2006 THIS DOC APPROVED 26 SEPT 2006</div>		
ORIGINAL DATE: 3 May, 2006 REVISION DATE: 21 September, 2006		AERO DESIGN LTD. 2013 – 39 th Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333
SHEET 1 OF 1		Quick Release Mounting Beams
DCL698-2		Rev. 1



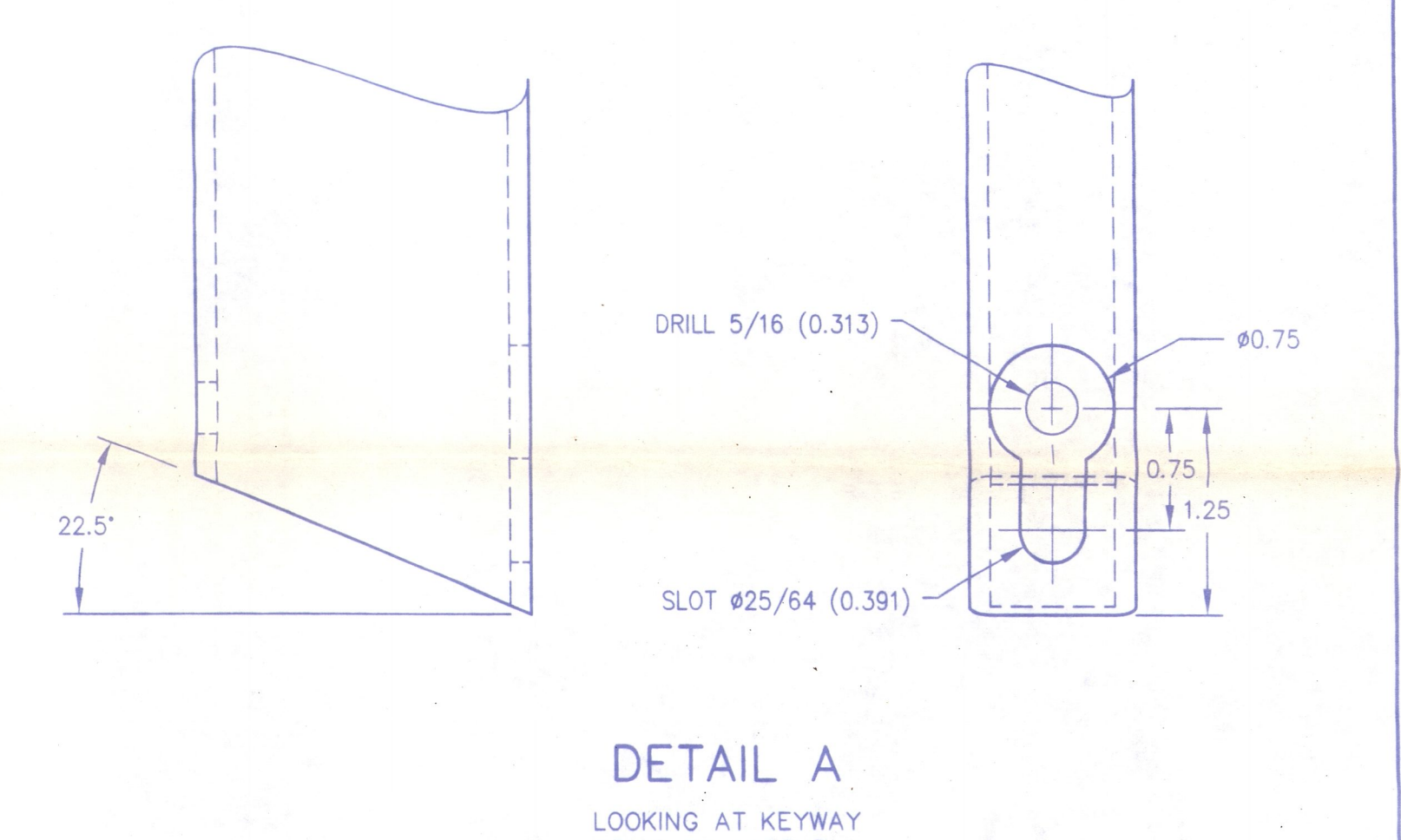
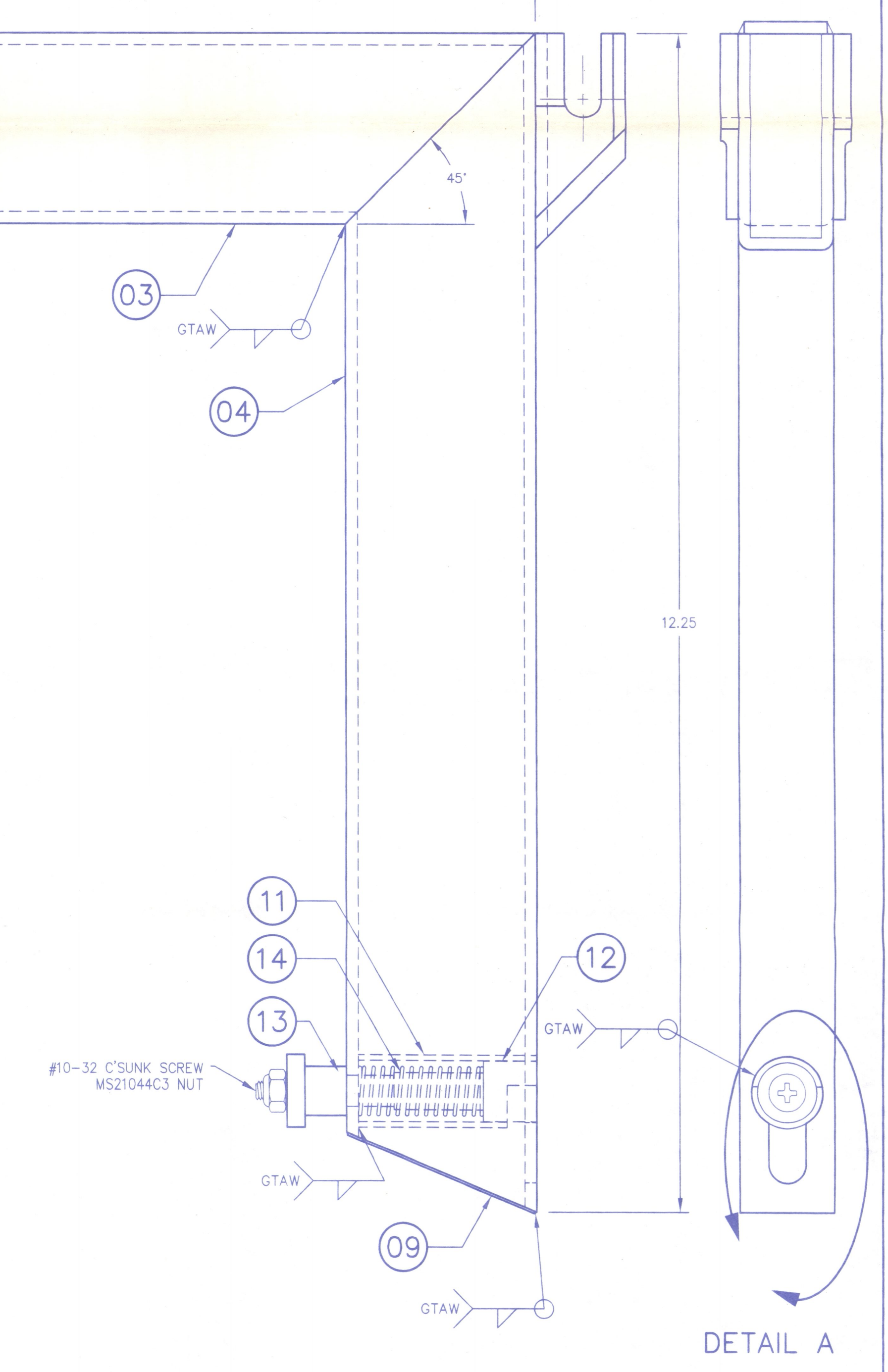
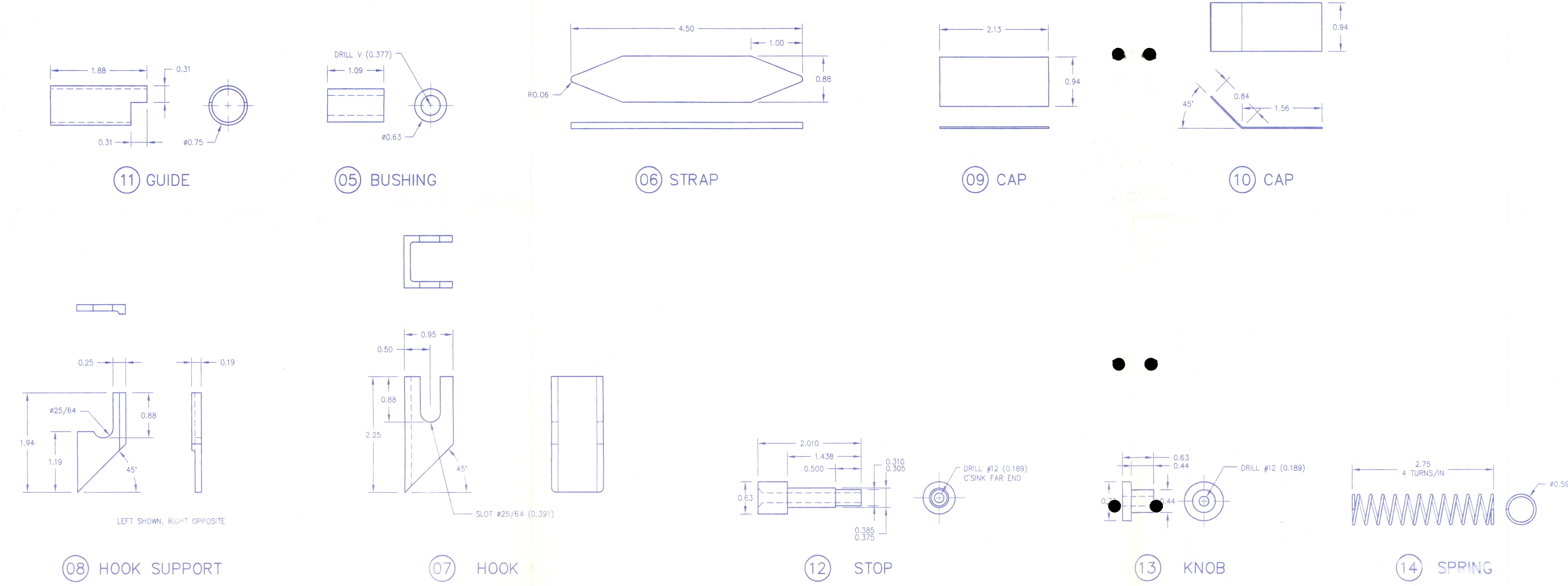
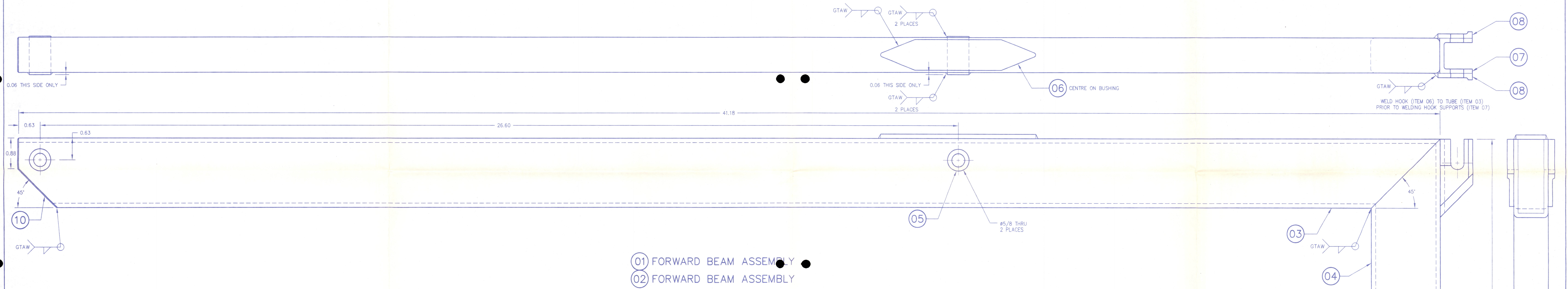
NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. WELDING OF STEEL TO BE COMPLETED BY GTAW METHOD TO AWS2685C.
WELDING ROD SHALL CONFORM TO ER70S-2 OR EQUIVALENT FOR 4130/HSS STEEL.
WELDING ROD SHALL CONFORM TO ER308L OR EQUIVALENT FOR STAINLESS STEEL.
3. ALL STEEL PARTS TO BE THOROUGHLY DEGREASED AND POWDER COATED PRIOR TO ASSEMBLY.
4. AFT BEAM ASSEMBLY (69831-02) MAY BE USED AS A DIRECT REPLACEMENT FOR AFT BEAM ASSEMBLY (69831-01).

1	1		MS20-04AC3	NUT				
1	1		ID-32	C/SUNK SCREW	STAINLESS STEEL	COMMERCIAL		
1	1		69830--23	15 SPRING		COMMERCIAL	15mm X 70mm SPRING	
1	1		69830--22	14 KNOB	6061-T6 ALUMINUM	QQ-A-200/8	#0.75 ROD	
1	1		69830--21	13 STOP	6061-T6 ALUMINUM	QQ-A-200/8	#0.625 ROD	
1	1		69830--11	12 GUIDE	304 STAINLESS STEEL	ASTM A269	#0.75 X 0.508 RND. TUBE	
1	1		69830--20	11 CAP	321 STAINLESS COND. N	AHT	0.025 SHEET	
1	1		69830--10	10 CAP	4130 STEEL COND. N	MIL-S-18729	0.025 SHEET	
1	1		69830--19	10 CAP	321 STAINLESS COND. N	AMS 5510	0.025 SHEET	
1	1		69830--18	10 CAP	4130 STEEL COND. N	MIL-S-18729	0.025 SHEET	
1	1		69830--16	09 HOOK SUPPORT	HSS STAINLESS STEEL	CSA G40.21 50R	1 X 1.0 X 0.125 ANGLE	
1	1		69830--09	08 HOOK SUPPORT	HSS STEEL	CSA G40.21 50W	1 X 0.75 X 0.125 ANGLE	
2	1		69830--17	08 HOOK	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE	
2	1		69830--07	08 HOOK	HSS STEEL	CSA G40.21 50W	1 X 2 X 0.125 TUBE	
1	1		69830--16	07 STRAP	304 STAINLESS STEEL	MIL-S-5059	0.010 SHEET	
1	1		69830--06	07 STRAP	4130 STEEL COND. N	MIL-S-18729	0.125 SHEET	
1	1		69830--05	06 BUSHING	304 STAINLESS STEEL	ASTM A479	#0.625 ROD	
1	1		69830--05	06 BUSHING	MILD STEEL	AISI 1020/1020	#0.625 ROD	
1	1		69831--14	05 TUBE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE	
1	1		69831--04	05 TUBE	HSS STEEL	CSA G40.21 50W	1 X 2 X 0.125 TUBE	
1	1		69831--04	05 TUBE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE	
1	1		69831--04	05 TUBE	HSS STEEL	CSA G40.21 50W	1 X 2 X 0.125 TUBE	
1	1		69831--13	03 TUBE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE	
1	1		69831--03	03 TUBE	HSS STEEL	CSA G40.21 50W	1 X 2 X 0.125 TUBE	

[illegible]

APPROVALS		DATE		<div>AERO DESIGN LTD.</div> <div>CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 2007</div> <div>2019 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7</div> <div>Tel: (403) 260-8027 Fax: (403) 260-8028 aerodesign@shawplanet.net</div>	
DRAWN:	JEFF CLARKE	06 APR 2006			
CHECKED:	E. BURGON				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:					
DECIMALS	ANGLES				
X.XXX ±0.010	±1/2"				
X.XX ±0.03					
X.X ±0.1					
SCALE: 1 OF 1			DWG. SIZE		DWG. NO.
SHEET 1 OF 2			A0		REV. 1



Q2 01	Q2 01	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
1	1	MS21044C3	NUT				
1	1	#10-32	C/SUNK SCREW		STAINLESS STEEL	COMMERCIAL	
1	1	69830-23	14 SPRING			COMMERCIAL	15mm X 70mm SPRING
1	1	69830-12	13 KNUT		6061-T6 ALUMINUM	Q-C 200/B	#0.75 ROD
1	1	69830-21	12 STOP		6061-T6 ALUMINUM	Q-C 200/B	#0.625 ROD
1	1	69830-11	11 GUIDE		304 STAINLESS STEEL	ASTM A269	#0.75 X 0.058 RND. TUBE
1	1	69830-20	10 CAP		321 STAINLESS COND. A	AMS 5510	0.025 SHEET
1	1	69830-10	9 CAP		4130 STEEL COND. N	MIL-S-18729	0.025 SHEET
1	1	69830-09	9 CAP		321 STAINLESS COND. N	AMS 5510	0.025 SHEET
1	1	69830-09	9 CAP		4130 STEEL COND. N	MIL-S-18729	0.025 SHEET
1	1	69830-08	8 HOOK SUPPORT		HSS STAINLESS STEEL	CAL 504.21 50R	1.0 X 1.0 X 0.125 ANGLE
1	1	69830-08	8 HOOK SUPPORT		HSS STEEL	CAL 504.21 50R	1.0 X 1.0 X 0.125 ANGLE
2	1	69830-17	07 HOOK		304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE
2	2	69830-07	07 HOOK		HSS STEEL	CAL 504.21 50W	1 X 2 X 0.125 TUBE
1	1	69830-16	06 STRAP		304 STAINLESS STEEL	MIL-S-5059	0.100 SHEET
1	1	69830-06	06 STRAP		4130 STEEL COND. N	MIL-S-18729	0.125 SHEET
1	1	69830-05	05 BUSHING		304 STAINLESS STEEL	ASTM A479	#0.625 ROD
1	1	69830-05	05 BUSHING		MILD STEEL	AISI 1010/1020	#0.625 ROD
1	1	69830-14	04 TUBE		304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE
1	1	69830-04	04 TUBE		304 STAINLESS STEEL	CAL 504.21 50W	1 X 2 X 0.125 TUBE
1	1	69830-13	03 TUBE		304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE
1	1	69830-03	03 TUBE		HSS STEEL	CAL 504.21 50W	1 X 2 X 0.125 TUBE
02	01	69830-02	02 FORWARD BEAM ASSEMBLY (STAINLESS STEEL)				
02	01	69830-01	01 FORWARD BEAM ASSEMBLY				

APPROVALS		DATE		AERO DESIGN LTD.			
DRAWN: JEFF CLARKE		06 APR 2006		CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M			
CHECKED: E. BURGIN				2013 - 30TH AVENUE N.E. CALGARY, ALBERTA, CANADA, T2E 6B7			
				tel: (403) 260-8027 fax: (403) 260-8332 aerodesign@compuserve.net			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:				BELL 206L / 407			
DECIMALS		ANGLES		QUICK RELEASE CARGO BASKET			
X.XXX ±0.010		±1/2°		FORWARD BEAM FABRICATION			
X.XX ±0.03				SCALE 1" = 1'		Dwg. NO.	
X.X ±0.1				SHEET 1 OF 1		REV.	
				A0		69830 1	

NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. WELDING OF STEEL TO BE COMPLETED BY GTAW METHOD TO AMS2895C.
WELDING ROD SHALL CONFORM TO ER70S-2, OR EQUIVALENT FOR A136/HR5 STEEL.
WELDING ROD SHALL CONFORM TO ER308L OR EQUIVALENT FOR STAINLESS STEEL.
3. ALL STEEL PARTS TO BE THOROUGHLY DEGREASED AND POWDER COATED PRIOR TO INSTALLATION.
4. FORWARD BEAM ASSEMBLY (69830-02) MAY BE USED AS A DIRECT REPLACEMENT FOR